



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,534	04/05/2000	Kay Rokman	30-509	7187

23117 7590 07/01/2003

NIXON & VANDERHYE, PC  
1100 N GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201-4714

EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 07/01/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/543,534

Applicant(s)

ROKMAN ET AL.

Examiner

Lynda M Salvatore

Art Unit

1771

SH

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period of Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) ☒ Responsive to communication(s) filed on 16 April 2003.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) ☒ Claim(s) 51-60 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 51-60 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some \* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment and accompanying remarks, Paper No. 15, has been entered. Claims 51 and 60 have been amended as requested. Applicant's amendment to claim 60 renders moot the 35 U.S.C. 112, first paragraph rejection set forth in section 4 of the last Office Action. Applicant's amendment to claim 60 renders moot the 35 U.S.C. 103(a) rejection as set forth in section 8 of the last Office Action. As such, these rejections are withdrawn. However, despite the advance, the amendments are not found to patently distinguish the claims over the prior art and Applicant's arguments are not found persuasive of patentability for reasons set forth herein below.

### ***Response to Arguments***

#### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 51-57 and 60 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hannes et al., US 4,112,174 in view of Weeks, 5,409,573 as set forth in section 6 of the last Office Action.

Applicant amended claim 51 to recite substantially all of the fibers in the non-woven mat are disposed in fiber bundles and deleted the phrase "and wherein the sizing is epoxy resin or polyvinyl alcohol (PVOH)" from claim 60. Applicant argues that there is no motivation to combine the references Hannes et al., in view of Weeks. Specifically, with regard to Hannes et al., Applicant argues that Hannes et al., teaches away from disposing "substantially all" of the

Art Unit: 1771

fibers into fiber bundles and that Weeks teaches fiber dispersions whereby the final product structure comprises little if any fiber bundles (Applicant's response, Page 6). This argument is not found persuasive on the grounds that Hannes et al., clearly teaches having fibers bundles ranging from 5 to 90% with a preferred range of 5 to 30%. Thus, despite the teaching to a preferred range by Hannes et al., it is the position of the Examiner that said teaching does not preclude Hannes et al. from being relied upon and a teaching of over 60% would meet the limitation of "substantially all" as defined by the Applicant (Applicant's response, Page 6). With regard to secondary reference of Weeks, the Applicant argues that Weeks teaches fiber dispersions and that it is inconsistent to combine Hannes et al., with Weeks. This argument is not found persuasive on the grounds that Weeks was provided to evidence that it is known in the art to improve the structural integrity of non-woven glass mats with binder fibers. Furthermore, there is nothing inconsistent in this teaching with respect to the disclosure of Hannes et al.

Therefore, motivated by the desire to produce a glass fiber mat having increased strength it would have been obvious to one having ordinary skill in the art to add the thermoplastic fibers of Weeks to the non-woven glass fiber mat of Hannes et al.

4. Claims 58 and 59 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hannes et al., US 4,112,174 in view of Weeks, 5,409,573 as applied to claim 51 above and further in view of Helwig et al., US 6,054,022 as set forth in section 7 of the last Office Action.

Applicant argues that Helwig teaches a soluble sizing agent rather than an insoluble sizing agent as recited in independent claim 1 (Applicant's response, Page 7). This argument is not found persuasive on the grounds that Helwig et al., was provided to evidence that it is known

Art Unit: 1771

in the art to provide chopped non-woven fibrous glass mats having the claimed density and basis weight ranges.

Therefore, motivated to provide a lightweight glass reinforcement mat it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the teachings of Helwig et al., and optimize the density of the glass fiber mat of Hannes et al.

**Conclusion**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the

Application/Control Number: 09/543,534

Page 5

Art Unit: 1771

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Is

June 30, 2003

A handwritten signature in black ink, appearing to read 'Terrel Morris', with a large, stylized flourish extending from the end.

TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700